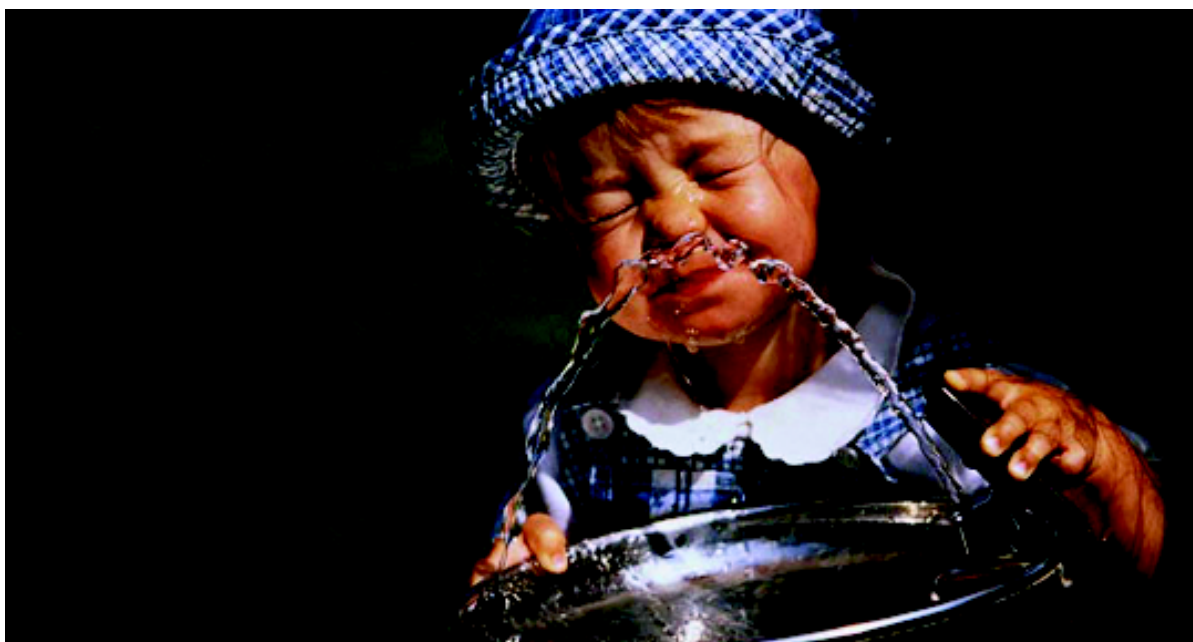


## Section 6: Human Health

Section 6 of the Lake Erie LaMP 2000 document provided an extensive discussion of the potential threat to human health from the critical pollutants and other contaminants of concern in Lake Erie. It described the pathways of exposure relevant to human health as: drinking water, recreational water use and fish/food consumption. The Lake Erie LaMP designated drinking water use of Lake Erie as unimpaired, while both recreational water use and fish and wildlife consumption are impaired. The LaMP 2000 human health section also examined and explained the application of a weight of evidence approach to looking at potential human health effects. An extensive list of resources and references concerning human health and the Great Lakes was provided, along with a list of ongoing or potential human health related projects in the Great Lakes. The ongoing research was aimed at issues in the Great Lakes basin, not just Lake Erie, and indeed, the human health issues presented were common to all the Great Lakes. The LaMP 2000 reports for the other lakes confirmed the commonality of the issues.



Section 6

35

For all of the LaMPs it has been difficult to set up a committee structure to focus on human health due to limited human health expertise residing in LaMP agencies and lack of additional resources. Therefore, the Binational Executive Committee (BEC), the body with management oversight for the LaMPs, has approved a proposal to create a Great Lakes Human Health Network. The Network would bring together experts from across the Great Lakes region to share information, reach consensus on Great Lakes environmental human health priorities, and enhance the work at their respective agencies through opportunities for collaboration. An initial organizational meeting has been held and an ad hoc committee of health agency representatives is developing terms of reference for operation of the Network. Once the Network is established, each of the LaMPs will provide liaison staff.

The Lake Erie LaMP Recreational Water Quality Beneficial Use Impairment Assessment (Kwavnick and Mortimer 1999) concluded that, on average, bacterial water quality standards were exceeded at Lake Erie's public beaches more than 20% of the recreational season. Bacterial indicators, monitoring programs, and criteria for issuing advisories or closing beaches varied from jurisdiction to jurisdiction. Even with no lakewide consistent measurement, it was obvious that beach use was universally impaired around Lake Erie.

In October 2000, the U.S. passed federal legislation amending the Clean Water Act referred to as the Beaches Environmental Assessment and Coastal Health Act, or BEACH Act. The BEACH Act requires states with coastal waters to adopt U.S. EPA's recommended bacteria criteria, or criteria as protective, by April 2004. The legislation requires U.S. EPA to conduct studies of new pathogens and pathogen indicators and to develop and issue any new or revised criteria guidance within five years. The BEACH Act also authorizes U.S. EPA to award grants to eligible coastal states (including the Great Lakes) to set up beach monitoring and public notification programs. In 2001, \$2 million was appropriated for coastal states to develop beach monitoring and notification programs, and an additional \$10 million will be awarded in 2002 to continue program development and implementation. The BEACH Act grants will result in improved beach monitoring and notification programs in the U.S. U.S. EPA's Office of Research and Development will be conducting epidemiological studies to examine health risks associated with swimming at several beaches across the country, including beaches along the Great Lakes.

In February 2001, a U.S. EPA/City of Chicago-sponsored Great Lakes Beach conference was held to share information on the science and technology of beach monitoring, and research on exposure, health effects, and water quality indicators. More than 250 environmental and public health officials, beach managers and regulators attended the three-day session. A draft *National Beach Guidance and Performance Criteria for Recreational Waters* was produced by U.S. EPA and public-noticed in the Federal Register with comment period ending in October 2001. The guidance will be used to help local health departments and beach managers implement a nationally consistent water quality-monitoring program for beaches.

In addition to refining the indicators, more work is needed to identify and eliminate the sources of bacterial contamination causing beach closures and advisories. U.S. EPA is starting to target wet weather remedial efforts near high use beach areas affected by combined sewer overflows and sanitary sewer overflows. Research is also needed to develop rapid analytical techniques to assist in more timely notification of high bacteria counts at public beaches.